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09/677,880	10/03/2000	Akihiro Yoshida	197811US2	6163
22850	7590	04/30/2004		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER AGGARWAL, YOGESH K	
			ART UNIT 2615	PAPER NUMBER 11

DATE MAILED: 04/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/677,880

Applicant(s)

YOSHIDA ET AL.

Examiner

Yogesh K Aggarwal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**Response to Arguments:**

1. Applicant's amendment, filed 02/20/2004, overcomes the following objection/rejection(s):

- Rejection of claim 1 under 35 USC 102(e).
- Rejection of claims 1-12 under 35 USC 103(a).
- The arguments presented have been considered and are found persuasive.

2. The newly added limitation of "normal operation" as now reflected in claims 1-12 raises new issue. It is being addressed w.r.t new grounds in view of the same references to Udagawa in view of Goto as set forth below.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Udagawa (US Patent # 6,195,125) in view of Goto et al (US # 5,678,106).

[Claim 1]

Udagawa teaches the following:

A digital camera (fig. 1) for acquiring image data by acquiring a subject image, comprising: an imaging device (figure 1: 3) configured to acquire said subject image (Udagawa

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col. 1 lines 6-8), a piezoelectric element (figure 1: 9) configured to displace said imaging device (Udagawa col. 5 lines 49-52 figure 1).

Udagawa fails to teach an energy accumulating unit configured to power a strobo unit is used as an electric power supply source for said piezoelectric element during normal operation. [Note: the normal operation of the piezoelectric element, as disclosed in applicants' specification on page 17, lines 1-16, corresponds to charging and discharging of the piezoelectric element during use of the camera].

Goto teaches that it is well known to use an energy accumulating unit configured to power a strobo unit as an electric power supply source for said piezoelectric element during normal operation (col. 16 lines 29-31, col. 6 lines 55-67, col. 17 lines 1-27 figures 1 and 2). In Goto, "normal operation" is the normal picture-taking mode (col. 16, lines 55-67). During the normal operation of the camera (col. 16 lines 29-31), when the piezoelectric actuator functions unsatisfactorily after getting power from the power supply P2, it has to be driven with a higher voltage (col. 17 lines 1-4). The power supply circuit P3, which drives the strobe circuit SB 44 and has a higher voltage output than P2 is used to drive the piezoelectric actuator 1 (col. 17 lines 5-27), leading to the "normal operation" of the camera. Therefore the power supply circuit P3 that drives the strobe circuit SB 44 is also used to supply power to the piezoelectric actuator 1 during normal operation of the camera as claimed.

Therefore taking the combined teachings of Goto and Udagawa as a whole, it would have been obvious to one skilled in the art to have been motivated to incorporate an energy accumulating unit configured to power a strobo unit, but also used as an electric power supply source for said piezoelectric element during normal operation as claimed. The benefit of doing

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so would provide a large displacement of the piezoelectric actuator with low electric power consumption as suggested by Goto (col. 2, lines 60-62).

[Claim 2]

The digital camera according to claim 1, wherein said energy accumulating unit includes a main capacitor for strobo unit provided inside or outside, and said piezoelectric element is charged by the energy accumulated in this main capacitor (Goto, col. 14 lines 61-63 figure 1).

[Claim 8]

Udagawa teaches the following:

A digital camera (figure 1) capable of acquiring an image by shifting pixels, comprising:  
An imaging device (figure 1: 3) configured to acquire a subject image (col. 1 lines 6-8),  
a piezoelectric element (figure 1: 9) configured to displace said imaging device (col. 5 lines 49-52 figure 1),

wherein said control unit (figure 1: 15) is configured to control acquiring a first image in a state not displacing said imaging device, and to acquire a second image by charging said piezoelectric element (figure 1: 9) in a state of displacing said imaging device (col. 5 lines 9-12, col. 5 lines 45-52).

Udagawa fails to teach a switching unit configured to charge said piezoelectric element by the energy accumulated in a main capacitor for strobo unit emission provided inside or outside, or to discharge said piezoelectric element during normal operation, and a control unit configured to control said switching unit for controlling the charging and discharging sequence of said piezoelectric element.

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[**Note:** the normal operation of the piezoelectric element, as disclosed in applicants' specification on page 17, lines 1-16, corresponds to charging and discharging of the piezoelectric element during use of the camera].

Goto teaches that it is well known to use an energy accumulating unit configured to power a strobo unit as an electric power supply source for said piezoelectric element during normal operation (col. 16 lines 29-31, col. 6 lines 55-67, col. 17 lines 1-27 figures 1 and 2).

In Goto, "normal operation" is the normal picture-taking mode (col. 16, lines 55-67). During the normal operation of the camera (col. 16 lines 29-31), when the piezoelectric actuator functions unsatisfactorily (col. 16 lines 55-67) after getting power from the power supply P2, it has to be driven with a higher voltage (col. 17 lines 1-4). The power supply circuit P3, which drives the strobe circuit SB 44 and has a higher voltage output than P2 is used to drive the piezoelectric actuator 1 (col. 17 lines 5-27) leading to the "normal operation" of the camera. Therefore the power supply circuit P3 that drives the strobe circuit SB 44 is also used to supply power to the piezoelectric actuator 1 during normal operation of the camera as claimed. Furthermore Col. 17 lines 44-45 disclose that CPU controls figure 3 to 9 in which figure 9 explains the charging and discharging of the piezoelectric actuator which serves as a switching unit as claimed].

Therefore taking the combined teachings of Goto and Udagawa as a whole, it would have been obvious to one skilled in the art to incorporate a switching unit configured to charge said piezoelectric element by the energy accumulated in a main capacitor for strobo unit emission provided inside or outside, or to discharge said piezoelectric element during normal operation, and a control unit configured to control said switching unit for controlling the charging and discharging sequence of said piezoelectric element. The benefit of doing so would be to provide

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a piezoelectric actuator that can provide a large displacement with low electric power consumption as taught in Goto (col. 2 lines 60-62).

[Claim 9]

Udagawa teaches the following:

A digital camera (figure 1) capable of acquiring an image by shifting pixels, comprising:

An imaging device (figure 1: 3) configured to acquire a subject image (col. 1 lines 6-8),

a piezoelectric element (figure 1: 9) configured to displace said imaging device (col. 5 lines 49-52 figure 1),

wherein said control unit (figure 1: 15) is configured to control acquiring a first image in a state not displacing said imaging device, and to acquire a second image by charging said piezoelectric element in a state of displacing said imaging device (col. 5 lines 9-12, col. 5 lines 45-52).

Udagawa fails to teach the following limitations (a)-(d). However the following limitations are well known in the art as evidenced by Goto.

(a) a switching unit configured to charge said piezoelectric element by the energy accumulated in a main capacitor for strobo unit emission provided inside or outside, or to discharge said piezoelectric element during normal operation (Goto, col. 16 lines 29-31, col. 6 lines 55-67, col. 17 lines 1-27 figures 1 and 2).

[**Note:** the normal operation of the piezoelectric element, as disclosed in applicants' specification on page 17, lines 1-16, corresponds to charging and discharging of the piezoelectric element during use of the camera].

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Goto teaches that it is well known to use an energy accumulating unit configured to power a strobo unit as an electric power supply source for said piezoelectric element during normal operation (col. 16 lines 29-31, col. 6 lines 55-67, col. 17 lines 1-27 figures 1 and 2).

In Goto, "normal operation" is the normal picture-taking mode (col. 16, lines 55-67). During the normal operation of the camera (col. 16 lines 29-31), when the piezoelectric actuator functions unsatisfactorily (col. 16 lines 55-67) after getting power from the power supply P2, it has to be driven with a higher voltage (col. 17 lines 1-4). The power supply circuit P3, which drives the strobe circuit SB 44 and has a higher voltage output than P2 is used to drive the piezoelectric actuator 1 (col. 17 lines 5-27) leading to the "normal operation" of the camera. Therefore the power supply circuit P3 that drives the strobe circuit SB 44 is also used to supply power to the piezoelectric actuator 1 during normal operation of the camera as claimed.

(b) a control unit configured to control said switching unit for controlling the charging and discharging sequence of said piezoelectric element (Goto, col. 17 lines 44-45)[CPU controls figure 3 to 9 in which figure 9 explains the charging and discharging of the piezoelectric actuator],

c) wherein said switching unit includes a charge adjusting circuit for stopping the charging operation when the charged voltage in said piezoelectric element becomes a first specified value to hold the charged voltage (Goto, col. 22 lines 52-54 Step 144 figure 9)[Setting a certain delay time means after a predetermined time the charging of the capacitor is stopped by a charge adjusting circuit],

(d) and for restarting charging operation when the charged voltage in said piezoelectric element becomes lower than a second specified value (Goto, col. 22 lines 60-67 Step 147-149)[After the



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piezoelectric actuator is discharged by setting a certain delay time in Step 147 i.e. after it becomes a second specified value, a charging operation is started again as taught in col. 22 lines 66-67],

Therefore taking the combined teachings of Goto and Udagawa as a whole, it would have been obvious to one skilled in the art to incorporate the limitations (a)-(d). The benefit of doing so would be to provide a switching unit (CPU) configured to charge and discharge said piezoelectric element wherein the piezoelectric actuator can provide a large displacement with low electric power consumption as taught in Goto (col. 2 lines 60-62).

[Claim 10]

Udagawa teaches the following:

A digital camera (figure 1) capable of acquiring an image by shifting pixels, comprising:

An imaging device (figure 1: 3) configured to acquire a subject image (col. 1 lines 6-8),

a piezoelectric element (figure 1: 9) configured to displace said imaging device (col. 5 lines 49-52 figure 1),

wherein said control unit (figure 1: 15) is configured to control acquiring a first image in a state not displacing said imaging device, and acquiring a second image by charging said piezoelectric element in a state of displacing said imaging device (col. 5 lines 9-12, col. 5 lines 45-52).

Udagawa fails to teach the following limitations (a)-(f). However the following limitations are well known in the art as evidenced by Goto.

(a) a switching unit configured to charge said piezoelectric element by the energy accumulated in a main capacitor for strobo unit emission provided inside or outside, or to discharge said

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piezoelectric element during normal operation (Goto, col. 16 lines 29-31, col. 6 lines 55-67, col. 17 lines 1-27 figures 1 and 2).

[**Note:** the normal operation of the piezoelectric element, as disclosed in applicants' specification on page 17, lines 1-16, corresponds to charging and discharging of the piezoelectric element during use of the camera].

Goto teaches that it is well known to use an energy accumulating unit configured to power a strobo unit as an electric power supply source for said piezoelectric element during normal operation (col. 16 lines 29-31, col. 6 lines 55-67, col. 17 lines 1-27 figures 1 and 2).

In Goto, "normal operation" is the normal picture-taking mode (col. 16, lines 55-67). During the normal operation of the camera (col. 16 lines 29-31), when the piezoelectric actuator functions unsatisfactorily (col. 16 lines 55-67) after getting power from the power supply P2, it has to be driven with a higher voltage (col. 17 lines 1-4). The power supply circuit P3, which drives the strobe circuit SB 44 and has a higher voltage output than P2 is used to drive the piezoelectric actuator 1 (col. 17 lines 5-27) leading to the "normal operation" of the camera. Therefore the power supply circuit P3 that drives the strobe circuit SB 44 is also used to supply power to the piezoelectric actuator 1 during normal operation of the camera as claimed

(b) a control unit configured to control said switching unit for controlling the charging and discharging sequence of said piezoelectric element (Goto, col. 17 lines 44-45)[CPU controls figure 3 to 9 in which figure 9 explains the charging and discharging of the piezoelectric actuator],

(c) Wherein said switching unit includes a charging switch circuit for turning on or off charging of said piezoelectric element (Goto, col. 22 lines 48-57 figure 9 Steps 143 and 145),

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(d) a discharging switch circuit for turning on or off discharging of said piezoelectric element (Goto, col. 22 lines 58-65 figure 9 steps 146 and 149),

(e) a detecting circuit for detecting the charged voltage in said piezoelectric element (Goto, col. 3 lines 35-39),

(f) and comparing circuit for comparing the charged voltage in said piezoelectric element detected by said detecting circuit and a reference voltage, wherein said charging switch circuit turns on or off charging of said piezoelectric element on the based on the comparison by said comparing circuit (Goto, col. 4 lines 9-15).

Therefore taking the combined teachings of Goto and Udagawa as a whole, it would have been obvious to one skilled in the art to incorporate the limitations (a)-(f). The benefit of doing so would be to provide a switching unit (CPU) configured to charge and discharge said piezoelectric element wherein the piezoelectric actuator can provide a large displacement with low electric power consumption as taught in Goto (col. 2 lines 60-62).

[Claim 11]

Udagawa teaches the following:

A digital camera (figure 1) capable of acquiring an image by shifting pixels, comprising:

An imaging device (figure 1: 3) configured to acquire a subject image (col. 1 lines 6-8),

a piezoelectric element (figure 1: 9) configured to displace said imaging device (col. 5 lines 49-52 figure 1),

wherein said control unit (figure 1: 15) acquires a first image in a state not displacing said imaging device, and to acquire a second image by charging said piezoelectric element in a state of displacing said imaging device (col. 5 lines 9-12, col. 5 lines 45-52).

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Udagawa fails to teach the following limitations (a)-(c). However the following limitations are well known in the art as evidenced by Goto.

(a) a switching unit configured to charge said piezoelectric element by the energy accumulated in a main capacitor for strobo unit emission provided inside or outside, or to discharge said piezoelectric element during normal operation (Goto, col. 16 lines 29-31, col. 6 lines 55-67, col. 17 lines 1-27 figures 1 and 2).

[**Note:** the normal operation of the piezoelectric element, as disclosed in applicants' specification on page 17, lines 1-16, corresponds to charging and discharging of the piezoelectric element during use of the camera].

Goto teaches that it is well known to use an energy accumulating unit configured to power a strobo unit as an electric power supply source for said piezoelectric element during normal operation (col. 16 lines 29-31, col. 6 lines 55-67, col. 17 lines 1-27 figures 1 and 2).

In Goto, "normal operation" is the normal picture-taking mode (col. 16, lines 55-67). During the normal operation of the camera (col. 16 lines 29-31), when the piezoelectric actuator functions unsatisfactorily (col. 16 lines 55-67) after getting power from the power supply P2, it has to be driven with a higher voltage (col. 17 lines 1-4). The power supply circuit P3, which drives the strobe circuit SB 44 and has a higher voltage output than P2 is used to drive the piezoelectric actuator 1 (col. 17 lines 5-27) leading to the "normal operation" of the camera. Therefore the power supply circuit P3 that drives the strobe circuit SB 44 is also used to supply power to the piezoelectric actuator 1 during normal operation of the camera as claimed.

(b) a control unit configured to control said switching unit for controlling the charging and discharging sequence of said piezoelectric element (Goto, col. 17 lines 44-45)[CPU controls

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figure 3 to 9 in which figure 9 explains the charging and discharging of the piezoelectric actuator].

(c) wherein said control unit is configured to control stopping the charging when said piezoelectric element reaches a specified voltage (Goto, col. 22 lines 52-54 Step 144 figure 9)[Setting a certain delay time means after a predetermined time, the charging of the capacitor is stopped by a charge adjusting circuit which is being controlled by the CPU],

Therefore taking the combined teachings of Goto and Udagawa as a whole, it would have been obvious to one skilled in the art to incorporate (a)- (c). The benefit of doing so would be to provide a switching unit (CPU) configured to charge and discharge said piezoelectric element wherein the piezoelectric actuator can provide a large displacement with low electric power consumption as taught in Goto (col. 2 lines 60-62).

[Claim 12]

Udagawa teaches the following:

A digital camera (figure 1) capable of taking an image by shifting pixels, comprising:

An imaging device (figure 1: 3) configured to acquire a subject image (col. 1 lines 6-8),

a piezoelectric element (figure 1: 9) configured to displace said imaging device (col. 5 lines 49-52 figure 1),

wherein said control unit (figure 1: 15) is acquires a first image in a state not displacing said imaging device, and to acquire a second image by charging said piezoelectric element in a state of displacing said imaging device (col. 5 lines 9-12, col. 5 lines 45-52).

Udagawa fails to teach the following limitations (a)-(f). However the following limitations are well known in the art as evidenced by Goto.

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(a) a switching unit configured to charge said piezoelectric element by the energy accumulated in a main capacitor for strobo unit emission provided inside or outside, or to discharge said piezoelectric element during normal operation (Goto, col. 16 lines 29-31, col. 6 lines 55-67, col. 17 lines 1-27 figures 1 and 2).

[**Note:** the normal operation of the piezoelectric element, as disclosed in applicants' specification on page 17, lines 1-16, corresponds to charging and discharging of the piezoelectric element during use of the camera].

Goto teaches that it is well known to use an energy accumulating unit configured to power a strobo unit as an electric power supply source for said piezoelectric element during normal operation (col. 16 lines 29-31, col. 6 lines 55-67, col. 17 lines 1-27 figures 1 and 2).

In Goto, "normal operation" is the normal picture-taking mode (col. 16, lines 55-67). During the normal operation of the camera (col. 16 lines 29-31), when the piezoelectric actuator functions unsatisfactorily (col. 16 lines 55-67) after getting power from the power supply P2, it has to be driven with a higher voltage (col. 17 lines 1-4). The power supply circuit P3, which drives the strobe circuit SB 44 and has a higher voltage output than P2 is used to drive the piezoelectric actuator 1 (col. 17 lines 5-27) leading to the "normal operation" of the camera. Therefore the power supply circuit P3 that drives the strobe circuit SB 44 is also used to supply power to the piezoelectric actuator 1 during normal operation of the camera as claimed

(b) a control unit configured to control said switching unit for controlling the charging and discharging sequence of said piezoelectric element (Goto, col. 17 lines 44-45)[CPU controls figure 3 to 9 in which figure 9 explains the charging and discharging of the piezoelectric actuator].

- (c) and also to stop the charging when said piezoelectric element reaches a specified voltage (Goto, col. 22 lines 52-54 Step 144 figure 9)[Setting a certain delay time means after a predetermined time, the charging of the capacitor is stopped by a charge adjusting circuit which is being controlled by the CPU],
- (d) wherein said switching unit includes a charging switch circuit for turning on or off charging of said piezoelectric element (Goto, col. 22 lines 48-57 figure 9 Steps 143 and 145),
- (e) a discharging switch circuit for turning on or off discharging of said piezoelectric element (Goto, col. 22 lines 58-65 figure 9 steps 146 and 149),
- (f) and a detecting circuit for detecting the charged voltage in said piezoelectric element, and said control unit is configured to control turning on or off said charging switch circuit based on the detected voltage of the detecting circuit (Goto, col. 3 lines 35-39).

Therefore taking the combined teachings of Goto and Udagawa as a whole, it would have been obvious to one skilled in the art to incorporate (a)–(f). The benefit of doing so would be to provide a switching unit (CPU) configured to charge and discharge said piezoelectric element wherein the piezoelectric actuator can provide a large displacement with low electric power consumption as taught in Goto (col. 2 lines 60-62).

Claims 3-7 are similar to claims 8-12 respectively except that control unit controls said switching unit for controlling the charging and discharging sequence of said piezoelectric element, wherein said control unit controls to take a first image by charging said piezoelectric element in a state of displacing said imaging device, and take a second image by discharging said piezoelectric element in a state before displacement of said imaging device which is changing the sequence of the first and second image taking in claims 8-12. It is obvious to one of an ordinary

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skilled in the art that selection of any order of performing process steps is *prima facie* obvious **in the absence of new or unexpected results**. See *In re Burhans*, 154 F.2d 690,69 USPQ 330 (CCPA 1946)[In the Specification, Page 28 lines 24-25 and Page 29 lines 1-3 the applicant discloses that the same effects are obtained if we do the process in the reverse order, that is, by taking the first image by discharging the piezoelectric element 24 and taking the second image by charging the piezoelectric element 24].

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh K Aggarwal whose telephone number is (703) 305-0346. The examiner can normally be reached on M-F 9:00AM-5: 30PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary examiner, Vu Le can be reached (703) 308-6613. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

YKA

March 15, 2004

  
VU LE  
PRIMARY EXAMINER